Claims

[c1]   A method for facilitating a transport scheme in an automated material handling system environment, comprising:

detecting an occurrence of a trigger event while monitoring production operations in an automated material handling system environment, said trigger event being user-defined;

identifying a materials candidate to purge from a production line in response to:

said trigger event;

production data captured relating to said materials candidate; and

user-defined criteria for purging materials from said production line;

selecting a disposition plan for handling said materials candidate;

generating a transport process job for said materials candidate operable for instructing said automated material handling system on executing said disposition plan; and

transmitting said transport process job to said automated material handling system for execution.

[c2]   The method of claim 1, further comprising updating production data to reflect activity conducted as a result of executed process jobs.

[c3]   The method of claim 1, wherein said trigger event comprises at least one of:

a timestamp;

a full stocker;

a WIP level achieved;

a product type;

a process time; and

a throughput level.

[c4]   The method of claim 1, wherein captured production data includes:

stocker identification;

stocker load;

stocker capacity; and

materials carried on said stocker.

[c5]   The method of claim 4, wherein said captured production data further includes performance metrics for a stocker, including at least one of:

relative throughputs;

mean stocker cycle times for materials capacity;

peak stocker cycle times for materials;

stocker mean times between incidents;

stocker availability; and

alarm condition relating to at least one of:

carrier drops;

weight loads;

contamination control; and

charge build up on carriers.

[c6]   The method of claim 4, wherein said captured production data further includes at least one of:

manufacturing process steps utilized on production materials; and

status of production activities occurring within a production area.

[c7]   The method of claim 1, wherein said user-defined criteria includes:

an age of a product being manufactured;

type of product being manufactured;

a class of product being manufactured;

priorities established for scheduled materials as set out in a production schedule;

life span of materials in a production line; and

lots that have not been processed for a specified period of time.

[c8]   The method of claim 1, wherein said disposition plan in-

cludes:

scrapping materials identified in said materials candidate;

transporting said materials candidate to a remote storage location; and

transporting said materials candidate to an alternate production area.

[c9]   The method of claim 1, further comprising a user interface operable for defining said trigger event, said criteria, and said disposition plan.

[c10]   The method of claim 1, further comprising:
parsing data relating to said materials candidate operable transforming said data into a format usable by said automated material handling system.

[c11]   A storage medium encoded with machine-readable computer program code for facilitating a transport scheme in an automated material handling system environment, said storage medium including instructions for causing a server to implement a method, comprising:
detecting an occurrence of a trigger event while monitoring production operations in an automated material handling system environment, said trigger event being user-defined;
identifying a materials candidate to purge from a pro-

duction line in response to:

said trigger event;

production data captured relating to said materials candidate; and

user-defined criteria for purging materials from said production line;

selecting a disposition plan for handling said materials candidate;

generating a transport process job for said materials candidate operable for instructing said automated material handling system on executing said disposition plan; and

transmitting said transport process job to said automated material handling system for execution.

[c12] The storage medium of claim 11, wherein said trigger event comprises at least one of:

a timestamp;

a full stocker;

a WIP level achieved;

a product type;

a process time; and

a throughput level.

[c13] The storage medium of claim 11, wherein captured production data includes:

stocker identification;

stocker load;

stocker capacity; and

materials carried on said stocker.

[c14] The storage medium of claim 11, wherein said captured production data further includes performance metrics for a stocker, including at least one of:

relative throughputs;

mean stocker cycle times for materials capacity;

peak stocker cycle times for materials;

stocker mean times between incidents;

stocker availability;

alarm condition relating to at least one of:

carrier drops;

weight loads;

contamination control; and

charge build up on carriers;

manufacturing process steps utilized on production materials; and

status of production activities occurring within a production area.

[c15] The storage medium of claim 11, wherein said user-defined criteria includes:

an age of a product being manufactured;

type of product being manufactured;

a class of product being manufactured;

priorities established for scheduled materials as set out in a production schedule;

life span of materials in a production line; and

lots that have not been processed for a specified period of time.

[c16] The storage medium of claim 11, wherein said disposition plan includes:

scrapping materials identified in said materials candidate;

transporting said materials candidate to a remote storage location; and

transporting said materials candidate to an alternate production area.

[c17] A system for facilitating a transport scheme in an automated material handling system environment, comprising:

a server executing an automated material handling system control application;

a data repository in communication with said server, said data repository storing:

trigger events operable for defining conditions for initiating a search for productions materials as candidates for purging;

purge criteria operable for defining conditions for executing a purge operation;

disposition operations operable for defining instructions for handling

production materials designated for purging; and

captured production data, said captured production data received from

production operations carried out on production materials occurring in said production area;

a production area in communication with said server via a communications network, said production area including:

at least one stocker carrying production materials;

at least one production bay including a process tool; and

at least one transport vehicle;

a purge tool executing on said server, said purge tool including:

a monitor component;

a user interface; and

a rules engine.

[c18] The system of claim 17, wherein said captured production data includes:

stocker identification;

stocker load;

stocker capacity; and

materials carried on said stocker.

[c19] The system of claim 18, wherein said captured production data further includes performance metrics for a stocker, including at least one of:

relative throughputs;

mean stocker cycle times for materials capacity;

peak stocker cycle times for materials;

stocker mean times between incidents;

stocker availability; and

alarm condition relating to at least one of:

carrier drops;

weight loads;

contamination control; and

charge build up on carriers.

[c20] The system of claim 19, wherein said captured production data further includes at least one of:

manufacturing process steps utilized on production materials; and

status of production activities occurring within a production area.